Nebraska Information Technology Commission

Community Technology Fund 2002

Application Form

Project Title: South Sioux City Wireless Municipal Area Network

Submitting Entity: City of South Sioux City, Nebraska

Grant Amount Requested: $13,250.00

Project Contact Information (Name, address, telephone, fax, and e-mail address):

Lance Martin, Communications Coordinator

1615 First Avenue

South Sioux City, Nebraska 68776

Phone: (402) 494-8328

Fax: (402) 494-7530

Email: lmartin@city.sscdc.net

Executive Summary

The South Sioux City Wireless Municipal Area Network project will create wireless access points or "hot spots" at ten (10) strategically identified areas in the community. The "hot spots" will allow access to the municipal area network or the Internet with wireless enabled devices like laptop computers, Digital Phones, or Personal Digital Assistants (PDAs) through a 802.11b standard for wireless Ethernet transmission. This project is a collaborative effort involving many partners: City of South Sioux, South Sioux City Public Schools, South Sioux City Police Department, South Sioux City Fire Department and South Sioux City Library.

This wireless project will create numerous benefits for the citizens of South Sioux City and for each project partner including: allowing the Police Department to better utilize recently installed Mobile Data Computing terminals to create a safer City, the School to create a wireless access network and increase learning opportunities for students, an increase in Internet access for students at the Library and School, the Fire Department to utilize GIS maps of fire hydrants and flow tests to provide a faster response to emergencies, and the City to provide faster more efficient services to its citizens. This project will build on a small existing wireless network. With the assistance provided by the NITC, the City of South Sioux City and its partners will be able to better provide services to their stakeholders utilizing new and existing technologies.

Goals, Objectives and Outcomes

1. **Describe the project, including:**
    - **Problem statement and needs assessment**
    - **Goals (i.e., increasing Internet literacy)**
    - **Project activities or outputs (specific, measurable steps to get to the goal--i.e., offering six sessions of classes). Include training and staff development activities if appropriate.**
    - **Expected outcomes (impact on the project's beneficiaries--i.e., at least 60 participants will learn to search for information on the Internet searches and send e-mail)**

Problem Statement: Through technology planning, the City of South Sioux and its project partners have identified areas where they can utilize wireless technology applications to address community needs, deliver services quicker and more efficiently, increase Internet access and learning possibilities, and provide a safer environment for the citizens of South Sioux City. While the problems addressed by the project are specific to each partner, the answer to all of them is the creation and use of the wireless municipal area network.

City of South Sioux City: The City is constantly searching for ways to provide more efficient and effective services to their citizens. Public Works employees must spend large amounts of time driving back and forth from the Department office to obtain work orders, change orders, and to check emails. The wireless network will allow them to access their orders and emails with wireless enabled devices from the hot spots around the community, thereby saving time and allowing them to quickly respond to problems. The Animal Control Department, which is staffed by one person, needs a way to check animal tags and licenses efficiently while in the field. Instead of capturing an animal, impounding the animal, and going to the office to call the owner, the Department will be able to capture the animal, check license and tags from a hot spot, and return the animal, saving impound costs for the owner and City. The future uses of the wireless network for the City are seemingly limitless and the City will continue to explore all options.

South Sioux City Police Department: The department has recently installed Mobile Data Computing terminals in their patrol cars, but are unable to utilize the terminals to their full potential without access to a wireless network. Without the wireless network officers must leave the field to file reports, check crime updates and emails, and lack the capacity to obtain photos or crime videos while in the field. This lack of access leads to a decreased amount of patrol time and other time inefficiencies. With access to the wireless network, officers will be able to go to a “hot spot” and submit reports, get crime updates and emails, obtain criminal photos or videos of a crime, without having to leave the field or their patrol duties. The Department also has a shortage of computers for reporting and researching purposes, officers are unable to access computers and must wait for them to come available, taking away from their patrolling duties. The wireless network will allow officers to work from their patrol cars, thus eliminating the need for additional computers in the Law Enforcement Center.

South Sioux City Community Schools: The school is always looking for creative and innovative ways to help them meet their technology mission statement: "Our staff, students and community must have technological tools readily available to maximize their learning. Toward this end, students and staff should have the capability to access, share and process information anywhere, anytime through a variety of network structures. This concept of a virtual school enables the learner to actively participate without regard to physical location." The school faces the problems that come with expanding their current network, finding the time to install and pull cables and high costs. The wireless network will allow the school to expand its network, access to the Internet, and increase learning opportunities quickly and efficiently.

South Sioux City Public Library: The Library has a need to increase access to the Internet for its patrons. However, due to the size limitations and wiring issues related to an older the building, the Library is prohibited from adding more PC workstations. The Library currently has three (3) PC workstations with Internet access and the demand for those PC's is very high, especially after school. Many times students and patrons are forced to wait in line to access the Internet, electronic card catalog, or electronic databases. The wireless network will allow the Library to increase Internet access without having to worry about space or wiring issues. The Library is currently seeking funding from the Nebraska Library Commission for five (5) wireless enabled laptops. If funding from the Commission is not received, the Library will pursue other funding options for adding wireless enabled laptops. The wireless network will also allow patrons with their own wireless enabled laptops to access the Internet, the electronic card catalog, and electronic databases while at the Library.

South Sioux City Fire Department: The Fire Department is currently unable to access critical information while they are in the field. The Department has GIS maps of all City fire hydrants, along with the most current flow tests for them. However, it is difficult for them to obtain that information while out in the field. With the wireless network, the Department will be able to access this information at one of the "hot spots" around the City. The Department is also unable to access Haz-Mat information off the Internet while in the field.

Goals:

The overall goal of this project is to create a wireless municipal area network which will be utilized by project partners to enhance and increase the services they provide to the citizens of South Sioux City.

Activities:

Purchase and install ten (10) wireless access points at seven (7) locations around the community, six (6) will provide outdoor access and four (4) will provide indoor access. The access points will be located at the following locations:

1) South Sioux City Law Enforcement Center – Indoor and Outdoor
2) South Sioux City Hall – Indoor and Outdoor
3) Public Library – Indoor and Outdoor

4) South Sioux City Cardinal High School – Outdoor

5) South Sioux City Junior High School – Outdoor

6) South Sioux City Parks and Recreation Department – Outdoor

7) South Sioux City Schools Administration Building – Indoor

Install nineteen (19) wireless network interface cards

Conduct wireless network training for project partners.

Establish an evaluation process and create a forum to allow for discussion on current and future uses of the wireless network.

Maintain the wireless network through regular maintenance and upkeep.

Outcomes:

City of South Sioux

Public Works Department staff will be able to access email and work orders via Compaq iPACS, which have already been purchased and are wireless enabled, but have not yet been used for wireless.

Allow citizens attending City Council meetings to follow the online agenda that the "paperless" Council uses.

The Animal Control Department, which is staffed by 1 person, will be able to check animal licenses and tags from the field. This will allow the Department to spend more time in the field. Creating a more efficient and economical department.

Department staff will be able to utilize GIS maps while in the field, eliminating the need to drive back and forth to the office.

This project will allow for the expansion of the current wireless network already operating in a limited area. Access points already exist in three locations: Parks & Recreation Department (Scenic Park), Riverview Treatment Plant, and the Public Works Department (26th Street).

Department will be able to file reports and permits from access points and will not have to wait until they get back to their offices. Allowing them to respond to citizen needs faster and more efficiently.

Creation of a wireless network model for other communities in Nebraska to utilize.

South Sioux City Police Department

Patrol Officers will be able to fully utilize the Mobile Data Terminals that have been installed in their patrol vehicles. The officers will be able to access instant crime updates, download photos of criminals or suspects, and submit reports instantly, all without having to leave their vehicles or patrol duties.

Patrol Officers will have access to anonymous email tips while in the field and will be able to respond in a more efficient manner.

This project will increase the access to computers for reporting and researching purposes, eliminating the need for additional computers. Creating cost savings for the Department and for the citizens of South Sioux City.

Patrol Officers will be able to spend more time patrolling, which should lead to a safer City for all citizens.

Patrol Officers will be able to access GIS maps of crime areas while in the field and not have to leave their patrol areas to do research.

South Sioux City Community Schools

The project will give students the freedom to learn outside of regular classroom walls.

This project will provide School staff with the ability to access real-time student information anywhere on campus.

Students will be able to use wireless technologies in the outdoor sports complex to track statistics, update the school website with real-time information, as well as broadcast video/audio over the network.

The School and Police Department will be able to add security cameras and equipment in parts of the School campus where adequate connections are not currently wired.

This project will increase Internet access for students and increase their chances for learning without increased costs to the School system.

The School will be able to reduce costs with the installation of the wireless access points, as they will not have to spend money on pulling cable.

South Sioux City Public Library

This wireless project will address the Internet access needs of Library patrons and students, while meeting the Libraries space and wiring needs.

Library staff will be able to conduct more Internet based educational programs for patrons and students, as current space requirements do not allow for this type of programming.

Patrons and students will be able to access the Internet, electronic databases, and the electronic card catalog with their own wireless enabled devices, creating more availability to existing Library computers for patrons that do not have their own.

South Sioux City Fire Department

Firefighters will have access to GIS maps of fire hydrants and flow tests while in field, allowing them to better respond to emergencies.

Firefighters will be able to access Haz-Mat information from hot-spots while responding to emergencies, giving them a better response time.

Firefighters will be able to access building schematics, as available, when responding to situations.

Project Justification

2. Explain how the proposed project supports one or more of the funding priorities by describing how the project:

- **Uses information technology to address community needs related to community and economic development, the delivery of local government and library services, and health care.**
- **Uses information technology to address community needs in innovative ways or initiates the use of information technology to address community needs.**
- **Demonstrates strong collaboration within a community or region in addressing IT development.**
    - This project supports the use of information technology to address community needs related to community development and the delivery of local government and library services. The wireless network will meet community needs, allow for the more efficient and effective delivery of local government services, and increase access to library services.
    - This project uses information technology to address community needs in innovative ways by creating a wireless municipal area network that will benefit the community and its citizens.
    - This project demonstrates strong collaboration among several community organizations including the City of South Sioux, South Sioux City Public Schools, South Sioux City Police Department, South Sioux City Fire Department and South Sioux City Library. Instead of each partner working to create an individual project to meet the IT development needs demonstrated in this project, the project partners have come together to develop an inclusive project that will benefit the community of South Sioux City. A representative from each organization was involved in the creation and development of this project and will continue to be involved as demonstrated by the attached letters of support.

3. Describe the expected benefits (both tangible and intangible) of the proposed project. If applicable, include any economic benefits or long-term cost savings. (5 points)

As demonstrated in the outcomes section of this application, each project partner will achieve numerous benefits from the implementation of this project and many of those

benefits will be passed along to the citizens of South Sioux City. Although it is hard to quantify, the economic benefits of this project are significant. Some of the project benefits include:

- **Creating a safer community.**
- **Creating more efficiency in government services.**
- **Conservation of community resources.**
- **Creation of a wireless network that will meet current needs and can be easily expanded to meet future needs.**
- **Increases Internet and computer access for citizens and local government employees.**
- **Local government bodies will be able to respond to citizen needs faster and more efficiently.**
- **Continuation of successful collaboration among local government entities.**
- **Creation of a model wireless network that other communities could use.**

Technical Impact

4. Describe the hardware, software, and communications needed for this project and explain why these choices were made. (5 points)

The 802.11b standard for wireless Ethernet transmission will be the technology platform for this project because it is a reliable, proven and affordable solution. The hardware chosen for this project was based on the City's experience with its current limited wireless system. Cisco Aironet in particular was chosen due to research that was done a year ago in searching for a solution for providing networking capabilities to the South Sioux City Parks and Recreation Department in their new location at Scenic Park. Installing fiber optics for the Parks and Recreation Department was not cost effective, so a wireless alternative was used. The main research vehicle for the project was the Public Technology Incorporated Telecommunications and Information Technology Task Force.

A Cisco Aironet wireless bridge was installed in the Riverview water treatment plant where a fiber optic connection to the City's network was available. Another Cisco Aironet wireless bridge was installed in the Scenic Park office of the Parks and Recreation Department. The wireless bridge has been installed and functioning flawlessly for over a year.

For the purpose of this project we intend to use four (4) Cisco Aironet 350 indoor access points and six (6) Cisco Aironet 350 outdoor access points. The intention is to strategically place the access points to maximize effective use. This is particularly important for the patrol officers so they can stay within their patrol zones to utilize the system. For the outdoor access points we will also utilize Hyperlink Inc. 8db amplified

omni-directional antenna kits (part number WN2408UA). This will allow for a greater range of coverage for the outdoor access points.

Wireless network interface cards will be necessary for devices to connect to the system. For the patrol vehicles we intend to use Avaya WaveLan cards (part number 848515722). These card kits come with a vehicle mount antenna for maximizing the connection range for the patrol vehicle. For all other devices we intend to use Cisco Aironet 350 wireless network interface cards (part number AIR-PCM350). Both cards support WEP or Wireless Encryption Protocol.

5. Address any technical issues with the proposed technology including:

- **Conformity with generally accepted industry standards. Projects which interface with other state systems (such as distance learning systems) should also address NITC technical standards and guidelines.**
- **Compatibility with existing institutional and/or statewide infrastructure.**
- **Reliability, security and scalability (future needs for growth or adaptation).**

A major concern for the implementation of this project is network security. Our intention is to hire Network Systems Plus of Sioux City, Iowa to implement the security measures they have recommended. Utilizing Microsoft Windows 2000 as the minimum standard for wireless access, built-in Microsoft security features can be implemented without purchasing additional software. This primarily deals with encryption of the data packets between two points, i.e. the communication between the wireless device and the exchange server for example. To accomplish this, IPSEC will be implemented on the servers users will attach to. This can be done on a per user basis or globally. Additionally, putting secure socket layer (SSL) access on the exchange web access to encrypt login authentication there as well. This will protect both direct and Internet access to the mail server. WEP or Wireless Encryption Protocol is the standard encryption provided by Cisco for the wireless connection itself so the connection is inherently secure.

Because this is an Ethernet based system, it will remain compatible with state and local infrastructure for years to come. This technology is a proven reliable performer as other local governments such as Greensboro, North Carolina and Seal Beach, California have already done successful, large-scale implementations. Scalability is extremely convenient with this system, thanks to the municipal fiber optic ring. The access points are relatively inexpensive and easy to install so wherever the City propagates their network via the fiber optics they can install additional wireless access point and further the system's coverage.

6. Describe how technical support will be provided.

Technical support for the access points will be provided by the City of South Sioux City's Communications Department, headed by Lance Martin. Network support will provided by Network Systems Plus of Sioux City, Iowa. The City has purchased Cisco's Smartnet maintenance on their existing access points and thereby has access to Cisco's

Technical Assistance Center as well. Technical support will also be provided by Lance Swanson, Technology Coordinator for the South Sioux City Community Schools.

Preliminary Plan for Implementation

7. Describe the project sponsor(s) and stakeholder acceptance. If letters of support are included, list the entities or individuals submitting letters of support and briefly summarize the letter's content. Include information on any match being provided by project sponsors. (5 points)

The City of South Sioux City has a proven track record of collaborative projects and is recognized as a leader in technology advancements. This project is a good example of these attributes. The City's technology projects have received national recognition in several forms including Civic.com Top 50 projects, Public Technology Small City of the Year, and the American Public Power Association Utility of the Year. These acknowledgements are the results of well-planned technology efforts that include:

1. An 8-mile publicly owned (city/school) fiber optic ring.
2. A Technology Academy in the high school.
3. The first paperless City Council in the State.
4. An E-City Program with the Chamber of Commerce.
5. An interactive web-based "Freenet".
6. Establishment of a Technology Park.
7. Establishment of a Community Technology Center (Cardinal Opportunity Center).

Project sponsors include: City of South Sioux, South Sioux City Public Schools, South Sioux City Police Department, South Sioux City Fire Department and South Sioux City Library. Letters of support from each of these sponsors have been attached to the application and show the their commitment to this project and the future of South Sioux City. Stakeholder acceptance for this project is very high, as it will provide numerous benefits to the entire community.

The City of South Sioux City will be providing the cash match for this project. The City and the School will provide the in-kind match for the project by providing the staff to do the installation and maintenance of the system. The cash match and in-kind match for this project are further described in the Financial Analysis and Budget section of this application.

8. Describe the project team, including their roles, responsibilities, and experience. (5 points)

Lance Martin, Communications Coordinator for the City of South Sioux City:
Lance Martin's role include purchasing the necessary hardware and supplies to facilitate the installations, to install the access points in the City buildings, to assist in the installation of the access points in the school's buildings, conduct training on how to use the network and to coordinate with the contractor in the implementation of the security

measures to insure network security. Lance Martin will also be responsible for maintaining the access points in the City's buildings and for providing assistance to the schools in maintaining their access points. Lance Martin has been the communications coordinator for the City of South Sioux City for two years. During this time he has been directly responsible for the construction, implementation, and maintenance of the municipal fiber optic ring including installation and implementation of fiber optics for South Sioux City Community Schools in conjunction with Lance Swanson, the school's technology coordinator. Lance Martin graduated college with an AA degree in communications after which he worked for Continental Cablevision in Los Angeles for ten years. After moving to Nebraska, Lance was employed by Nortel for a period of seven years and Lucent Technologies for two years before becoming the communications coordinator for the City of South Sioux City. He has an extensive background in communications with twenty-two years experience in this field.

Lance Swanson, Technology Director, South Sioux City Community School District: Lance Swanson will assist in the setup and on going support for the access points. Lance Swanson will also help insure there aren't any security gaps and coordinate network training of users along with Lance Martin. Lance Swanson has been with South Sioux City Community School District for almost 2 years. Lance Swanson spent the prior 6 years as PC/Network Manager at Gurney's Seed & Nursery in Yankton, SD. While in Yankton Lance taught technology classes at Mount Marty College as an Adjunct Professor. Lance Swanson got his start creating graphics and programming computers in High School and College. Lance Swanson has been configuring and setting up network equipment since the introduction of the local area network (LAN) to education and business. Lance Swanson currently manages over 850 computers on a network that connects 9 different facilities in 2 different cities. Lance will also utilize the assistance of a student helper from the School's Cisco Training Academy to assist in the installation of the access points for the school.

Numerous other team members were involved in the planning of this project and will continue to stay involved in the planning for future of the wireless network:

Lance Hedquist, City Administrator; Scot Ford, South Sioux City Chief of Police; Denis Campbell, South Sioux City Fire Chief; and Kathleen Jacobs, South Sioux City Public Library Director.

9. List the major milestones and a timeline for completing each milestone. (5 points)

Milestones	**Target Completion Date**
Secure Funding	June 2002
Purchase Equipment	July 2002
Install Access Points	July – September 2002
Network Training	July – September 2002
Network Evaluation & Report	November 2002
Final Evaluation & Report	June 2003

10. Describe how the project will be sustained. (5 points)

South Sioux City and its collaborating partners are confident that funds provided by the Nebraska Information Technology Commission will be a sound investment. The wireless network will be continued when funding sources are discontinued. The City and its partners will cover the operational and maintenance costs associated with the network. Project partners will be responsible for cost of additional access points in the future and for the expansion of the network. Partners will also incur costs associated with making existing technologies wireless enabled, i.e. purchasing network interface cards.

11. Describe the project's evaluation plan, including measurement and assessment methods that will verify project outcomes. (10 points)

Project partners will be asked to evaluate the wireless network, its functions, ease of use, time and cost savings attributed to the network, and problems encountered during a six (6) month evaluation meeting of all project partners in November 2002. Lance Martin and Lance Swanson will coordinate this evaluation meeting and compile the six month evaluation report for the NITC. In June 2003 a final evaluation meeting will be held with all project partners. The final evaluation process will include a survey of wireless network users to get their input on how to improve and expand the network. During the final evaluation meeting, project partners will decide what the next step for expanding the wireless network in South Sioux City will be.

Financial Analysis and Budget (20 points)

The budget will be scored on reasonableness (up to 10 points), mathematical accuracy (up to 5 points), and the strength and appropriateness of the match (up to 5 points).

	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
Personnel Costs(1)			$1,676		$1,676
Contractual Services (2)	$2,000				$2,000
Capital Expenditures (3) (Hardware, software, etc.)	$10,950	$2,700			$13,650
Supplies and Materials	$300				$300
Telecommunications					
Training					
Travel					
Supplies and materials					
Other costs (4)					
TOTAL	$13,250	$2,700	$1,676		$17,626

Match Percent = 25%

Financial Narrative Notes and Instructions

Several categories (see below) **require** further itemization.

1. Please include estimated number of hours or full-time equivalent (FTE) by position. Include separate totals for salary and fringe benefits. If it is necessary to itemize on a separate sheet, include only the subtotal in this table.
2. Please itemize other contractual expenses on separate sheet.
3. Please itemize capital expenditures by categories (hardware, software, network, and other) on a separate sheet.
4. Please itemize other operating expenses on a separate sheet.
5. Please indicate the source of any cash match.
6. Please indicate the source of any in-kind match and how it will be documented.
7. Please provide a breakdown of any other external funding sources. Sources of external funds may include grants from federal agencies or private foundations.

1. **Please include estimated number of hours or full-time equivalent (FTE) by position. Include separate totals for salary and fringe benefits. If it is necessary to itemize on a separate sheet, include only the subtotal in this table.**

All personnel costs will be in-kind contributions and are documented in number 6.

2. Please itemize other contractual expenses on separate sheet.

(20) Hours of technical labor @ $100/hour $2,000.00

Labor provided by Network Systems Plus of Sioux City, Iowa to provide security measures and technical support. Rate based on estimates provided by Network Systems Plus.

3. Please itemize capital expenditures by categories (hardware, software, network, and other) on a separate sheet.

Capital Expenditures:

(6) Outdoor access points with amplified antennae kits	$8,400
(4) Indoor access points	$2,400
(19) Wireless network interface cards	$2,850

Supplies and Materials:

(1) Box of category 5 plenum network cable and connectors	$300
Total	$13,950

Prices for this project were based on bids supplied by:

HyperLink Technologies, Inc.
1201 Clint Moore Road
Boca Raton, FL 33487

McLeodUSA Integrated Business Systems
417 4th Street, Suite 280
Sioux City, IA 51101

5. Please indicate the source of any cash match.

The City of South Sioux City will provide the cash match of $2,700 for this project.

6. Please indicate the source of any in-kind match and how it will be documented.

The following in-kind match is based on estimated hours and current rates of pay. Hours will be documented on time sheets and turned into the City to keep track of the in-kind match. Hour estimates are based on the installation and maintenance of the three existing access points in the City.

Installation of Access Points:

Lance Martin, Communications Coordinator	28 hours @ $19	$532.00
Lance Swanson, Technology Coordinator	12 hours @ $24.50	$294.00
Cisco Training Academy Student	12 hours @ $6.50	$ 78.00
Total		$904.00

Maintenance of Access Points:

Lance Martin, Communications Coordinator	16 hours @ $19	$304.00
Lance Swanson, Technology Coordinator	12 hours @ $24.50	$294.00
Total		$598.00

Training Time:

Lance Martin, Communications Coordinator	4 hours @ $19	$ 76.00
Lance Swanson, Technology Coordinator	4 hours @ $24.50	$ 98.00
Total		$174.00

Total in-kind match:	**$1,676.00**

7. **Please provide a breakdown of any other external funding sources. Sources of external funds may include grants from federal agencies or private foundations**.

N/A

February 13, 2002

Nebraska Information Technology Commission
521 S. 14th Street, Suite 200
Lincoln, NE 68508-2707

Dear Commission Members:

It is my pleasure as the South Sioux City Public Library Director to support the City of South Sioux City in securing the Nebraska Information Technology grant for the year 2002. I work closely with Lance Martin, the City's communications coordinator, and feel his knowledge and vision have done much to further the City's pursuit of being a national leader in the area of technology.

Through this grant, the Library will realize an increased potential to Internet access. We are currently seeking funding to purchase five patron laptop computers and a wireless access point. With the award of this grant, the Library will be one step closer to meeting our goal. Although technology plays a large role in the delivery of library services today, that role will continue to increase. The Library must offer the best services possible to its patrons. This grant is one way of doing just that.

Sincerely,

Kathleen C. Jacobs, Director
South Sioux City Public Library
kjacobs@sscdc.net

SOUTH SIOUX CITY
POLICE DEPARTMENT

S.E. Ford

Chief
of
Police

14 February 2002

Ms. Anne Byers
Community Technology Manager
Nebraska Information Technology Comm.
521 So. 14th Street Suite 200
Lincoln, NE 68508-2707

Dear Ms. Byers,

The South Sioux City Police Department is pleased to offer our endorsement and support to this "wireless technology" project application. We feel that it is the doorway to many future benefits to our department. This project, in conjunction with our mobile data project has the potential of providing fast and efficient messaging and information dissemination to officers in the field. In a time when critical information delivered in a timely manner is crucial to the effectiveness of law enforcement and the safety of our community, a wireless information network delivered directly to the officer in the street is of the utmost importance.

It is our hope that you will give every consideration to this proposal.

Sincerely,

S. E. Ford
Chief of Police

City/County Law Enforcement Center -701 West 29th Street -South Sioux City, Nebraska 68776
Phone: (402) 494-7512 Fax: (402) 494-7507

February 1, 2002

Anne Byers
Community Technology Manager
Nebraska Information Technology Commission
521 South 14th Street, Suite 200
Lincoln, NE 68508-2707

Dear Ms. Byers,

The South Sioux City Fire Department is excited to partner with the City of South Sioux City and their project partners for the wireless municipal area network grant proposal being submitted to the NITC.

With the wireless network in-place the Fire Department will be able to take advantage of technologies, currently unavailable to us while we are out of Department Headquarters, to provide a better and faster response to emergency situations in which the Department is involved. We feel this project will help create a safer City for everyone living in and visiting South Sioux City.

The South Sioux City Fire Department looks forward to working with the NITC, South Sioux, and the other project partners on this innovative project that will benefit the citizens of South Sioux City.

Sincerely,

Denis Campbell
South Sioux City Fire Chief

South Sioux City Community Schools

STEVEN K. RECTOR, Superintendent
DAVE HAWKINS, Assistant Superintendent
ROZANNE C. WARDER, Special Education Director
RICHARD FEAUTO, JR., Business Mgr., Admin. Asst.
JEB ARCHER, Superintendent Buildings and Grounds

ADMINISTRATIVE OFFICE
820 E. 29th Street – Box 158
South Sioux City, Nebraska 68776
Phone (402) 494-2425
Fax (402) 494-3916

Serving Dakota City and South Sioux City, Nebraska....Getting The Right Results By Doing The Right Things For All Students

Anne Byers
Nebraska Information Technology Commission
521 S. 14th Street, Suite 200
Lincoln, NE 68508-2707

02/07/2002

Dear Ms. Byers,

It is our pleasure to be partnered with the City of South Sioux City in a grant proposal for wireless technologies. South Sioux City School District has had wonderful experiences working with the city of South Sioux City in the past. An example of this is the community-wide Fiber/ATM network that has been a huge success.

With the Mobile Wireless equipment, students would have everything they need to collaborate on assignments, create multimedia presentations and access libraries of information on the Internet, wherever learning takes them.

Here are a few examples of how wireless technologies offer better productivity, service, convenience, and cost advantages over traditional wired networks:

- Wireless networking would give our student's the freedom to follow the lesson in the actual science lab or **outside** in the nearby arboretum.
- Mobility-Wireless LAN systems can provide staff with access to **real-time** student information anywhere on the campus.
- Students will use the wireless technologies in the outdoor sports complex to track statistics, update the school website with real-time information, as well as broadcast video/audio over city/school networks and the Internet.
- The school or local law enforcement would have ability to add **security** cameras and equipment in parts of the campus where we don't have adequate connections.
- Installation **Speed and Simplicity** - Installing a wireless LAN system can be fast and easy and can eliminate the need to pull cable through walls and ceilings.
- Scalability-Wireless LAN systems can be configured in a variety of topologies to meet the needs of specific and ever changing applications and installations.

This mobility supports productivity and service opportunities not possible with traditional wired networks. The school district also plans to help with setup and on-going technical support for the project. We look forward to bringing the lab to the students.

Sincerely,

Steve Rector
Superintendent

Lance Swanson
Technology Director